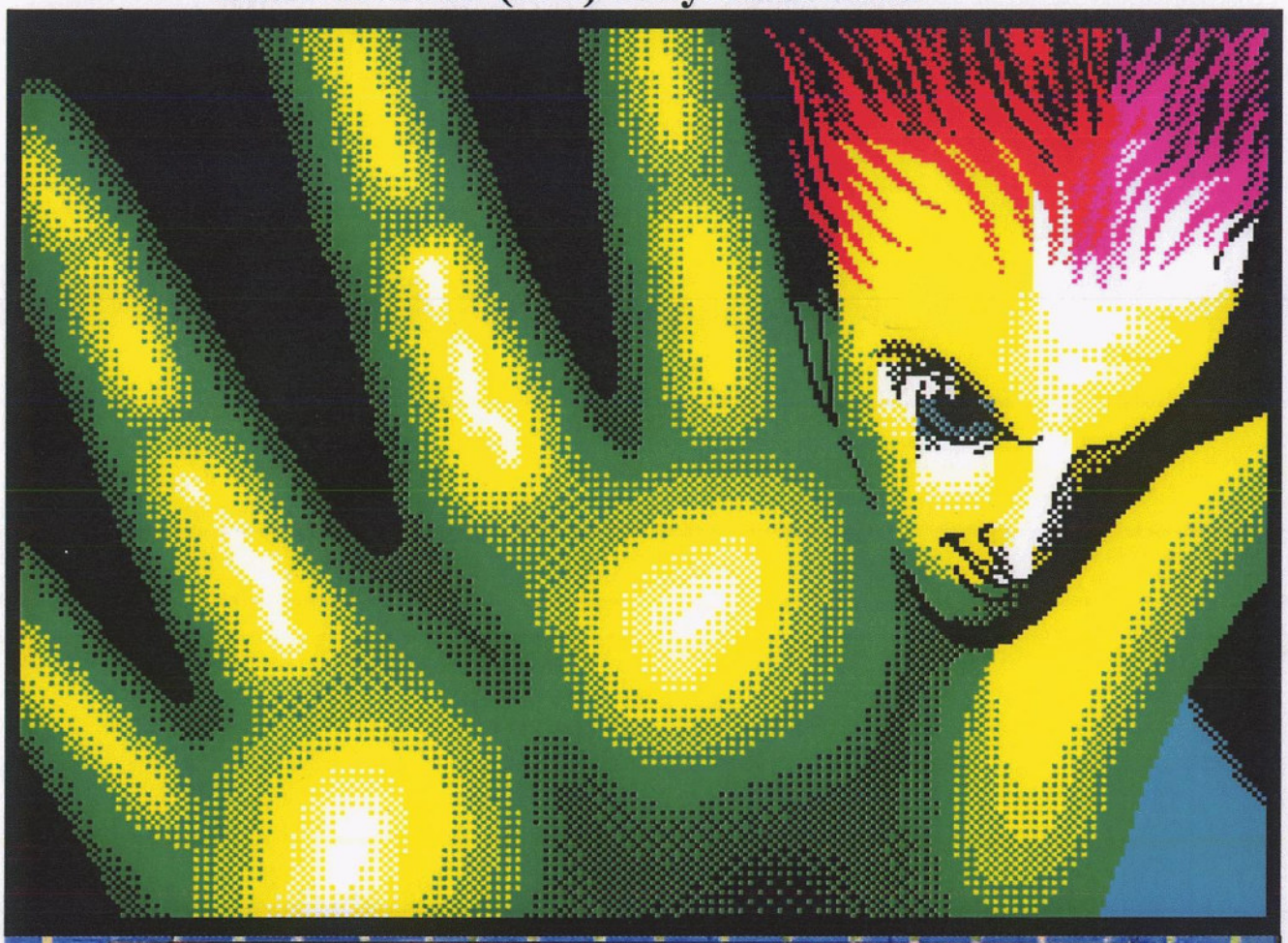
SUC-SESSION

YOUR SPECTRUM - MAGAZIN

Issue 03/2002 (190) May/June 2002



Whatever the future will bring us, it will be small, black and unbelievable good!

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Publisher

The Spectrum-User-Club, formally known as the Spectrum-User-Club Wuppertal, is the oldest existing Spectrum-Club in Germany, the ASC is the only Spectrum-Club in Austria. Since 1998 the Club-Magazine SUC-SESSION and SCENE+ have been sent together to all club members. They are compiled from contributions produced by the editor(s) as well as the readers. We call on all readers to send in their contributions as text files on cassette, +D, Opus, MB02 or MS-DOS (Word or pure Text files) or handwritten, per e-mail or printed on paper to us.

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How can you become a Member

Membership is basically free but the main services, the clubs magazine SUC-SESSION and SCENE+ can be subscribed to individually or together.

The Price:	Single issue	Yearly subscription (6x)
1) SUC-Session Magazine	3,00 €	16,00 €
2) SUC-Session Magazine as a PDF-Download	1,50 €	8,00 €
3) SCENE+ Disk-magazine	2,50 €	12,00 €
4) SCENE+ on Cassette	3,50 €	18,00 €
5) SCENE+ as a TAP-Download	1,50 €	8,00 €
6) Combi-packet SUC-Session & SCENE+ Disk	5,00 €	26,00 €
7) Combi-packet SUC-Session & SCENE + Tape	5,50 €	28,00 €

Our magazines can be mixed in any combination you want it is only important to tell us exactly what you want. Orders for our Download-Service should be sent by E-mail to:sintech@online.de.Your can pay by Cheque(Euro), Paypal or Bank-transfer.Account Nr.. 3205069, Sort-code 380 707 24. As reason for the payment please include the information : Packetnumber(s), for example Nr. 6 or 2 and 5 or whatever you want to order..
New members who are ordering the Diskette version of SCENE+ should state the required format, we have available MB02+, Opus, +D und now also D80/Didaktik. If you are ordering additional Disk's or Cassettes together with a Combi-Packet then the price for these must be added to the Subscription number. Any questions should simply contact us per E-mail or under: 0711/775033.

Preface

Dear Spectrum-Friends,
what is not the most productive Spectrum-time lies before us and partly also behind us. The summer is not really a time for computers, but more for activities away from home. That's the way it should be so that on those rainy, snowy days we can experience even more satisfaction especially when working with the Spectrum.
Never-the-less at least the SUC-Session (as long as it's in it's printed form) can be taken with us to the lakes or the sea and so we are very happy to again be able to present you with a selection of interesting articles.
One disappointment is that the index for Scene + Diskette is not in this issue. Unfortunately our Leszek is suffering from a bad eye complaint which makes it almost impossible for him to do any work involving reading from a monitor. He is trying to get Scene+ finished but unfortunately not in the time scale necessary to get the index into this issue. I have delayed the issue for 3 weeks but in the end you want your magazine. I'm expecting that Leszek will complete the diskette so that I can distribute it with the magazine.
In spite of this and in the interest of Leszek we are looking for someone who would be interested in taking over the work at least temporarily, at least until as we hope his health improves. Suitable to take over the work is someone with a +D (or emulator) and an Internet connection. Leszek can continue to work on the programming, it is just a case of putting everything together for the diskette. Perhaps someone will offer their services.

And lastly a word about our English edition. The success we had hoped for just hasn't happened. We hoped that within a short time we would reach at least 100 new readers from Spain, Italy, Great Britain and the USA. Unfortunately we have only won about 20 readers and none at all from Spain or the USA. A number of these readers were already taking the German edition, and so aren't really new readers, although the fact that the magazine is now available in English has been greeted for the most part very positively by these readers.

From our point of view the reason for the small take up by new readers is mainly because of scepticism about doing business with a foreign organisation. I would therefore like to ask all of the readers of our magazine to promote it internationally. If you find the magazine good, then please tell people you know who are interested in the Spectrum. Write in Newsgroups, Web-pages or on-line magazines. If the others see that there are already a number of reader, then they will have more trust and maybe send off a subscription. A good example of this is the MB02 which didn't take off in England until the first interfaces had been delivered and the news began to spread.

In the end the demand was so great that it was difficult to meet it and we would be happy if this happened again. I put the magazine together myself and write a large part of it. I'm even more enthusiastic about this work when I know that even more readers are going to see it. So, I am happy about every new subscription, when you want to see the magazine grow and get better, then help to achieve this *(Thomas does a great job on the magazine – lets all try to get it really well known in the English speaking world – Ian).*

Thanks.

Readers Letters

As always we love to receive your letters, especially as they show the interest that there is in the Spectrum and the magazine. In general the readers corner is also there to stimulate the communication between users, especially now that with the English readers we have a broader base.
Please, use this possibility to answer the questions asked here or to comment on possibly incorrect answers.

The first letter reports on the possible death of a Speccy. Sad, Very sad:
Hi Thomas!
Yesterday I managed to kill my third Speccy!!!!!! After about 3 hours of use (in the past 3 hours was no problem) the keyboard stopped working and the reset button didn't work. Switching it off and back on produced a rather strange picture on the monitor and I thought to myself arrgggghhhhhh.....
After I disconnected the +D and the Kempston mouse and it still didn't work I switched him off and retired in a depressed state to bed!!! I've sent an E-Mail to Robert Siegler, but don't believe he will repair one for me if I give him 2 defective speccy's.Oh well, I can but hope!
And with you is everything o.k.?
Praise to Odenthal for his article about Sprites! Great explanation, even I understood it! Yesterday I wanted to give it a try but as I said after 3 Hours no chance!
What's happening with MB02 or 03 don't they exist any more?
See you, Thomas Schwarz

Hallo Thomas,
Robert has already repaired you computer, as usual in exchange for a faulty computer. This shows that we have a real Spectrum-Fan carrying out the repairs and for all users that's really great. So a call to all: If you have a faulty Spectrum, Robert can help you. His work is really good and to-date he has only had to give up on some Opus Discovery's. Contact via the club.
I'm sure Christoph will be pleased to see your praise and it will of course motivate him to produce further articles. It would be nice if as a result of such articles we could publish something home written in SCENE+. It doesn't have to be a complete game a small Sprite animation or something similar would be great.
On the subject of MB03 you will just have to keep your eyes open and watch the news. As soon as anything happens we will be writing about it. As from this year the MB02 is not being produced any more. The successor was supposed to be offered for sale immediately but it seems that it is not yet ready.

And the next is an E-Mail from Hungary:
Hallo Thomas!
I have some good news and I hope you have some good things for me too. But first I hope you had a nice time in the USA.
About SUC-Session: I have downloaded the English PDF-Version. I found my letter in the Readers corner and I read your answer, that the magazine is not a professional magazine

and for this reason contains so many errors. Hm, as I flick through the pages I find more errors.
For example: About the P.O.S. – Homepage: „At the moment there is a report on a project to build 2 AY-Soundchips into a Spectrum ...". Can't you remember that this was already in my first article about Clones and accessories? It really isn't anything new. If I remember correctly it was mentioned on the P.O.S. – Page „Turbo Sound" and in my article „DUAL AY". Some people also call it „Quadra Sound" but it's not important what it's called, You really could only write that this development had already been reported in SUC-Session.
A further failure concerns my article and on the „SCENE+" page. I understand that „SCENE+" is simply copied and added. But when you read it and my article , then you will understand what I mean. Take more care.
And now the worst fault... about payment: I can offer you first class articles (Soft, Hardware, Interviews). I hope that the English edition and the possibility to download the magazine will bring you many new readers, so that you can pay me for my articles. When you expect a Boom-year, it has to be a minimum to use as many professional Journalists (like myself)as possible to satisfy the readers. When you are of the same opinion then we can work together to make your magazine into the best Spectrum-Magazine, that has every existed, we will profit from this and have satisfied readers. About the free issues: It's ok, that I can download them but please after 3 issues (6 months) send me the printed versions in German and English and also a couple of extra's that I will distribute, for example to Nyitrai.
These articles are in the planning stage:

- SpeccyDOS Emulator (only ¾ of aside and a link to the English pages) - Perhaps already in this issue
- Smartmedia Card Interface + the operating system
- Interview with someone about the "hard times" (1992-95),about the international scene, Games development and lots more.
- Interview with the producers of the one and only Hungarian Spectrum magazine.

I hope to hear from you soon.
Richard Tarjan

Hallo Richard,
Before I come to the "worst fault", something about the errors: I write and read a mass of articles. If I write something in an article that was written months before under another name in another article then I simply haven't noticed. I'm sure that no other readers noticed it either, only you and only because the article was from yourself. Also the statement still isn't incorrect: It is reported in P.O.S. , whether it's old or new is not the point. With „Stars on the Internet" we only provide a short report about a web site, we don't go into a lot of detail, instead we recommend a visit to the site (or sometimes not). Despite searching I didn't find the other errors you spoke of. Though it is true that in the German edition I did make some small changes to the article. You wrote so much about how old Nyitrai is. That he was already old in 1982, when he was just 38 years old. I changed this part, as a 38 year old is simply not old. Perhaps it's different in Hungary but in Germany men often reach twice that age, Nyitrai had by our reckoning only half his life behind him. As I also have a „3" at the front of my age I would protest about this statement " I AM NOT OLD "! Ian took the English article and improved the form of some of the text, I can't judge that but Ian will have done it correctly.

Now to the „worst fault": The price that members pay for the subscription is calculated from the costs. Post, Copy, Labels, envelopes etc. Even for the downloads there are costs for the homepage traffic. At the end what comes out of it is simply a 'zero', in other words we work without losses but also without any profit. From what are we supposed to pay journalists? Even if we had more readers it wouldn't change anything as each only covers the costs that his/her subscription create. In reality that isn't quite true there are small profits made but they are given out again on such things as publicity designed to encourage new readers to join us. We have to win new readers otherwise if we only had cancellations and no new subscriptions eventually the readership numbers would sink so low that the borderline would be reached where the subscriptions no longer covered the fixed costs and we would make a loss.
I have allowed you as payment for your articles to download the English version of the magazine from our homepage. However I have to be fair. Lots of other readers pay their subscriptions and also write articles for us. I can't put you above these other readers and give you things for nothing while they are paying. I can however put this point up for discussion: Should we raise the subscription price so that we can give those who write articles the magazine free? Or perhaps start a competition like with SCENE+ „Best article of the year" and give a money prize? I would like to ask for comments from readers about this subject.

Shame, shame. In the last issue I proudly announced the first woman in our Club. But it was a mix-up:
Dear Mr. Eberle, thankyou for the welcome to your club. I'm very sorry but I have to disappoint you but the subscription was for my son Tarquin. The confusion occurred because the subscription was paid with my credit-card.
Warmest greetings Diana Mills

Hallo SUC-Session
Now that the Didaktik is no longer being produced are you going to import other Spectrum clones from the east such as Scorpion or GMX? Sprinter is interesting but I'm afraid it's rather like the SAM, they see it as a new computer rather than a Spectrum clone.
I'm interested in the MB-03 and am asking myself the question whether the RAM that it contains can be used to expand the memory of a 48K/128K machine? Are they providing Network-sockets (as with Interface I and Disciple)? I read the article about the connection of a hard-disk to the MB02+ and would like to know if it possible to increase the size of the partitions. I've already read both magazines from beginning to end and am very happy to see new hardware and software for the Sinclair ZX Spectrum.
Your Tarquin Mills

Two letters in one, from mother and son. So, goodbye Diana and warmest welcome Tarquin. To the questions: SINTECH is not planning to import other Speccy clones in the near future. The reason is that it's very difficult or impossible to find really trustworthy and reliable partners in Russia. It is difficult enough to find then in the Czech republic and that's only worked up till now because Germany has a border with the Czech republic and now and again I can drive over and discuss the problems. Even so it can still mean that customers have to wait up to 5 months for

products they have ordered... I'm trying to imagine how long it could be with a Russian supplier.
Perhaps you can't believe it, in the past neither could I but in many of these countries it can happen that you simply don't hear anything about your order for long periods of time. That's not the way I want SINTECH to do business. We want to offer a good and speedy service and that's why we work with suppliers who have proved that they can deliver quality. PeterPlus, the manufacturer of the Sprinter, has not yet provided this proof. They were offering their products for almost a year before they were really ready. If we had put the Sprinter into our programme then the customers would have been looking to us for the cause of the long delay and not by the manufacturer who was also making us wait. It is a pity but you can of course order yourself directly in Russia.
The MB03 is not yet finished. In principle it is an MB02+ with an integrated IDE – Kit. The software which is used with the MB02+ and Hard-disk, partitions the disk into diskette sized chunks with a maximum of 256 diskettes possible, Drive 1 and 2 are the real hard-drives, Drive 0 is the cassette and Drive 9 the RAMDISK. This leaves 252 Diskette's to be emulated, so around 500 MB. As each partition must have the same format as a diskette it can only be about 2MB. In spite of that it's good enough, with larger directories the overview would soon be lost. It's possible to get around 50 programmes in a partition or often even more.
The hard-disk and the SRAM memory of the MB02+ can be used during a program run. The access times to both is very fast and not that different from accessing the RAM in a real Spectrum. It just needs someone to program it. As the Russians don't have the MB02+ it's unlikely that a complex game is likely to use this possibility. There are however a number of utilities which can be saved and then run from the memory of the MB02+.
Networking is also possible with the MB02+. It has a Printer port and lots more. Using it a network is possible and I have a simple „Chat"-Software available for such activities. The MB02+ makes many things for the user possible, someone just has to use them. In the Czech republic a number of people have connected a DA-Converter to this port, to produce 8 bit samples and here in Germany Odin has build the hardware for a sound-sampler and written the necessary software.
The problem at the moment is that the MB02+ is sold-out and the MB03 not yet available. The makers had promised me an MB03 for January, but as I wrote above in many countries the clock ticks more slowly. I think I need to drive to the Czech republic again...

Hallo Thomas!
I thought it was about time I contacted you again – it's been a while. Looking through the last couple of issues of the Club magazine I see that there has been quite a lot written about Hardware. That's not simply something that Hubert and I could accept and so we have written another couple of articles for the magazine. No, don't be scared that was only a joke. We also are happy to read the hardware articles and it's really super what some freaks manage to achieve. Personally I follow the subject of a Hard-disk on the Spectrum very intensively, another subject not fully exhausted is that of the Monitor cable. Amstrad blocked a number of ideas and have left us users to see how we cope with what they left.

Of course Hubert and I know that not everyone can get enthusiastic about adventure solutions, but that is our specialist area and so that is what you will also see in articles from us in the future. But we want to look at a few other subjects in the near future and write articles about them. As you can see with the attached article about Interscript this is where it starts. I think, you can find a use for it.

And now something new that I think will be a little bit of a surprise for you. My girlfriend Eva and myself plan to marry in the autumn and have already begun to build our house. Which of course means that in the near future there has to be less time for the Spectrum. But don't be afraid, Hubert and I have a number of articles in preparation and with those we have sent you today you should be OK for this year. The future work on the Club Info is guaranteed despite the building activities.

Now I'm going to close for today. There's lot's to do. Continued success for your/our club. Today we have the 20 year jubilee of our beloved computer. So, when that's not going to be a good year....

Harald Lack

Hallo Harald, I have to say that you have prepared well, your articles will certainly be sufficient for all of the issues this year. You have described some adventures that I don't know, and which Leszek would certainly like to have for SCENE+. Perhaps you can send him something from your collection, he will certainly give his thanks. The topic 'Hard-disk' will become more and more important, whereby there are possibilities even without the MB02+. We will keep at it. The Monitor cable is also a subject, though it's not all Amstrads fault. There a many different types of monitor and input signals. We've had simple circuits for video signals, the last time for RGB. This time we have reported on a cable for the +2A and we could report on an RGB kit for the 48K or about a VGA-Interface. We just need someone to develop it. Where are you all!!!!
Your forthcoming marriage doesn't surprise me, you've written for a long time that you have a girlfriend and eventually one has to make it legal. At least you haven't chosen the same date as ours, Annette and I are getting married on the 20th July and since we set the date we have found more and more couples who have chosen exactly the same day.
The real sensation for the 20 year jubilee just hasn't happened, more some have disappointed who announced to organise a great Spectrum-User-Meeting and then have done nothing. Remaining are the usual meetings, till now in Holland, on the 14. + 15. September in Wittenberg and also the Spectrumania once again in Aidlingen, whereby the autumn dates are not yet exactly fixed. Where we are going to do anything special in this year? What's special about such meetings are the users themselves, it can only be something really great when lots of people participate, perhaps with lot's of visitors from abroad. Perhaps it's possible with the English editions of our magazine...

That publicity in the Internet pays of is proved by the following e-mail:

Hallo Thomas.
I've just got to know the English version of SUC-Session. Well done – I'm going to ask my bank how I can send you Euro's! It's a long time since we had contact, but please remember me to Ian Spencer (*Hi Alan nice to hear from you – Ian)*.
It was interesting to read in a letter from Rupert Hoffmann , about a SAM Emulator on Wolfgang Haller´s Christmas-CD. I would really like to have the SAM-Emulator, as I have a big biscuit barrel full of SAM diskettes, which I can no longer use. Can you tell me where I can get such a CD?
And the last thing is to ask for help. Some time ago I saw some news about a +D Clone Kit, either to build yourself or as a finished product. I had sent an e-mail to the source P-C-R@t-online.de and asked for more information, but I have never had an answer. Do you know anything about this +D clone?

Friendly greetings
Alan Cox

Dear Alan, Thanks for your e-mail. I'm really happy that you want to subscribe to SUC-Session. The cheapest was to send the money is simply put it in a registered letter. As far as I know in Great Britain the contents are even insured so there is no risk.
As to the SAM Emulator CD: I've never tested the emulator. I can make you a copy of the CD, but think it would be better if you asked Wolfgang for permission first. The best thing would be to write to Wolfgang, his English is very good: womoteam@t-online.de
(Alan, I have quite a lot of experience with the SAM emulator as I use it often. The easiest thing is to download it either from http://sourceforge.net/projects/simcoupe ***or probably better from the simcoupe homepage at*** www.simcoupe.org***. The version on the CD is a very old one and the download is the newest version. If you have any questions then I may be able to answer them just e-mail me at*** ianspencer@hotmail.com***. -Ian)***
And now to the +D Clone: I know that a number of guys have been working on this for quite a few yearsl and I'm not sure if I should believe that anything really exists. Fortunately the source you named is our Peter Rennefeld, he's a reader of our magazine and so perhaps he can help clear things up.

And another from Great Britain. This time a short report about our magazine in the newsgroup Comp.sys.sinclair:
I found a number of things very interesting –The description of the new games which are under development, some of the readers letters and general things and I also found the Hardware-Corner interesting. But it was very dry with obvious filler articles like the complete Adventure-Game-solution. So that it looks as if you don't get many pages for your money.
I admire anyone who produces a Speccy-Magazine, that is worth taking notice of. Keep it up.
Adam D. Moss

After a long time at least that was one reaction in the Newsgroup. On our homepage we have made an old issue (January/Febuary) available as a free download for anyone who would like to get to know the English edition. To say something to the evaluation: The contents and the size of the magazine are controlled by the readers. The more articles we get the more sides we produce. Of course there are parts which are filled by the editor, but we don't create everything, the readers must help. We hope with the English edition to reach a wider circle of readers and through that to receive more articles. The first successes are clear to see.
As for the form of the magazine there are often various opinions, some like large print, others want smaller print, more pictures or less... In any case we don't want to waste any space, that would bring unnecessary printing costs. I keep for example the borders fairly small in order to allow as much text as possible. On many sides I do away with columns, which also costs space. That not everything is optimal is probably the reason why in end I don't work in an editorial office. But I'll keep at it...
(As an Englishman who has lived in Germany for many many year perhaps I can comment that it's true nearly all German magazines are 'dryer' more serious than their English equivalents. Hey but there's nothing stopping you English readers writing interesting articles with a lighter side –Ian)

Staying with the E-Mails, this time however a German speaking one:
Hallo Herr Eberle,
... So I have received my 01 / 02 copy of the SUC-Magazine. I read the Hardware-Corner with interest. After Ramsoft with the Emulator „Realspectrum" had shown what a screen picture should look like there is much to be done to realise this with the Spectrum. Each Spectrum generation had it's own faults concerning the video output. I'm working at the moment on putting together the signal conversion info and circuits for TV- and Monitor connections.
So I have something negative to say about the circuit description in the SUC-Magazine page 12, mentioned above.
The Encoder TEA 2000 does not produce RGB-Signals. These come from the ULA. The TEA 2000 has two TTL inputs for each colour (Red: R0,R1 Green: G0,G1 Blue: B0,B1). With the total of 6 bits it's possible to produce 64 colours / Black and White and 2 Grey levels. In the Spectrum this is not fully used. The „Bright"-Signal can set the inputs R0,G0,B0 to "L" , when the related colour is at a „H-Level" , whereby the colours could bring both inputs to "L". The TEA generates only the Composite-Video signal, which in the +3 is only taken to the modulator.
To Club Membership
After a 12 year pause, this year I have brought out my Spectrum+ and have remembered the old times. I was amazed at the actual amount offered in the Internet, where it's clear that not only old but also younger users are keeping the Spectrum alive. With the +3 I have fulfilled an old wish and now I want to expand my Spectrum+ with a Floppy disk interface. Up to now I have had a home-brew Betadisk connected.
As I'm a sort of new boy, naturally I'm missing a lot of information about what has been happening in the last years as well as what is expected in the future. I'm not exactly a game fan. My interests can be describes as Measurement, Control, Assembler Programming and on up to the uses of Micro controllers.
Lots of Greetings Manfred Striegler

Hallo Herr Striegler, the Internet makes it possible, so quickly to find your way back into the Spectrum world. Our readers are enthused again and again by our Hardware Corner, this is shown by our surveys. It's super that after so many years there is still something to report about hardware. The article about the RGB-Cable is in the main correct, for the cable it really doesn't matter whether the signals come from the TEA2000 or the ULA. Never the less for the technically inclined the comment is interesting, I'm interested in how I can *get my Speccy to use the full 64 colours!!!!!!* That would be something. But seriously: There is still lots to be discovered and it works best when everyone exchanges information for example in our magazine..

News in Brief

XGamer
The XGamer is supposed to make it possible to play Microsoft XBox games on the Spectrum. LCD couldn't wait and immediately obtained one of these devices and sent us this picture (I know, LCD above isn't big enough).

badvert Made by Mr J Nash, not to mention a tip of the hat to LCD and SR Usher

At last-the upgrade... X-Box 48K

Take the quantum leap

Are you ready to take the next step with your X-Box? Introducing the X-Box 48K upgrade – *tripling* the memory of your machine so you can

- Play larger, more complex games.
- Write your own games.
- Calculate your taxes.
- Have help with your homework.
- And much, much more.
- And make music, or something.

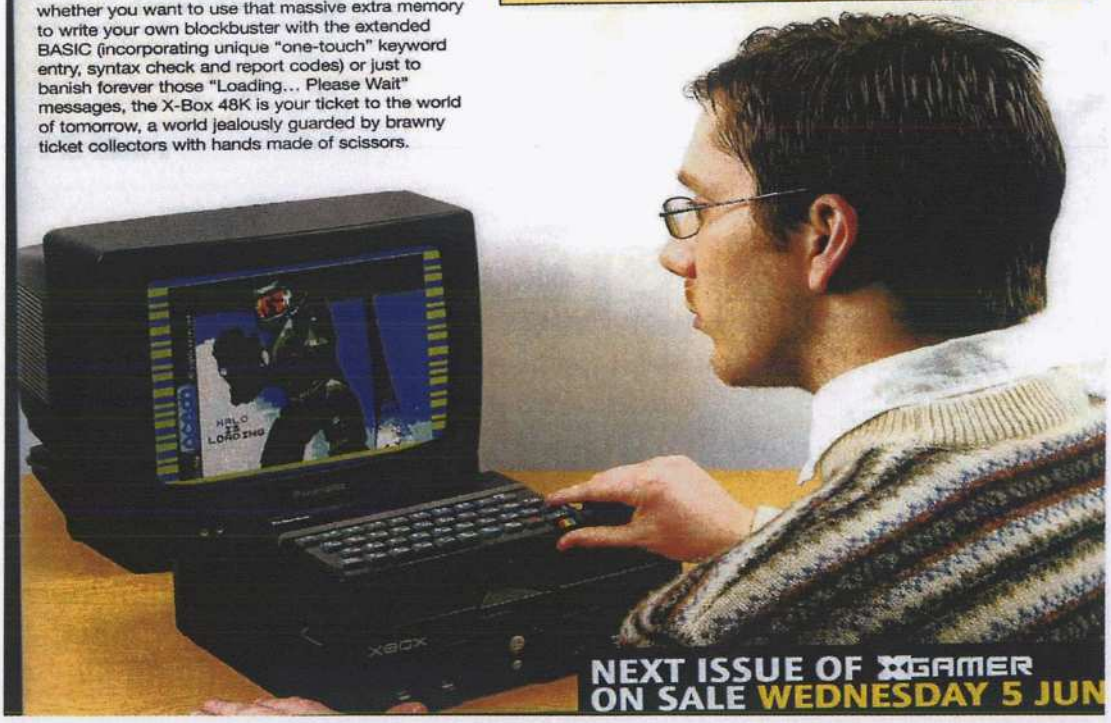
You may have found the X-Box's standard 16K fine to begin with – but now you're more sophisticated and demanding, and possibly pubescent, understandably you want more. You want the 48K upgrade.

See the whole spectrum

With the X-Box 48K, you'll experience a whole new world of interenteractivetainment – whether you want to use that massive extra memory to write your own blockbuster with the extended BASIC (incorporating unique "one-touch" keyword entry, syntax check and report codes) or just to banish forever those "Loading... Please Wait" messages, the X-Box 48K is your ticket to the world of tomorrow, a world jealously guarded by brawny ticket collectors with hands made of scissors.

X-Box 48K features compared to its nearest rivals

	X-Box 48K	*Playstation Model A*	*Playstation Model B*	*Commodore N-64*
Guide price	£125	~~£99.99~~	£400,000	£18.75
Standard RAM	48K	32K	33K	16K
Hi-res graphics	✓	✗	Ish	✓
Sound	Buzz	Hoot	Hiss	Honk
Colours	✓	✗	Smudged	✓
Evil	Very	✓	Very	1/3
Full-size moving-key keyboard	✓	✗	✗	✗
Can survive car crash	✓	✗	✗	✗
Number of games	c3,000	c5,000	c1,000	c750
User-programmable	✓	✗	✓	✓
No, honestly	✓	✗	✗	✗
And those games? That's better	c500	c1,000	c250	12



NEXT ISSUE OF XGAMER ON SALE WEDNESDAY 5 JUN

News in Kürze

+D Clone
Thanks to Alan Cox (see the Readers Letters) we have discovered that a +D clone is being produced in Germany. It's not yet in series production, but you can see the project at http://www.worldofspectrum.org/NotThePlusD

Technical
A technical side for the Spectrum is going to be created. I've tried it, at the moment it's not working, but try it yourself perhaps it will be starting soon: http://www.anycities.com/andydansby/

Shucon
That's the name of the Grill-Party for Spectrum-Users in the Czech-Republic. Computers are not essential for this day however fun and probably alcohol (I'm afraid) are. Jaxon Hollis is putting on Shucon and it is taking place between the 27.7 or 4.8 in Nezdenice. Anyone who would like to know more can contact the Editor and will receive a description of how to get there.

Swap n Shop
At YAHOO an Interest group has been set-up to exchange, buy and sell Spectrum bits. To-date there is not much happening, but I'd like to advertise it. So here we go. Get Swapping and Shopping at http://groups.yahoo.com/group/timexsinclairswapnshop

ZX-Party 2000
Also in Poland the success of last of last year is going to be repeated. So that we will again have a ZX-Party. It's probable that no-one will have a chance to read this entry before the party is over but for completeness here never-the-less is the information:
ZX-Party 2000 in Tuczno (near Walcz), on the 3-7 Juli 2002
Entrance is free for visitors from outside Poland. More information from: silentriot@interia.pl
Competitions: Demo, Intro 16, Music, Graphic.
Web pages: http://www.symphony.vdb.pl/

Memory expansion of the MB 02 to 512 KB
At the meeting in Urmond(NL) I had help from Roelof Koning and Johan Koelman to realise the memory expansion for the MB02. My participation was only the idea, obtaining the IC's and letting my MB02 be the subject of the experiment.
Three IC's are necessary for the modification. The memory-chip and one each of 74LS00 and 74LS14. I have 15 sets of IC available. The Memory-chip is placed in the socket on the printed circuit board (3 pins are bent up, 74LS14 directly next to the memory and the 74LS00 above any neighbouring IC.
Included in the package:
Circuit diagram and Position plan
Coloured image of an open MB 02
System diskette (Orginal 128kB-Diskette didn't work)
The price will be around 25 Euros (About 16 Pounds).
Almost anyone who can solder should be able to carry out the modifications, As only the 74LS00 in „with floating connections" and a few points on the circuit board, plus 3 pins of the Memory-chip need to be soldered. Anyone who is interested in the Memory expansion and believes he can carry out the work should contact me and I'll send the complete package straight away. If there is anyone who doesn't believe they can carry out the modification then perhaps an electronics friend can help or the next Speccy-Meeting will be turned into more of a construction meeting.
My Address is: Norbert Opitz, J. F. Böttger Str. 7, 06886 Lutherstadt Wittenberg, Tel.: 0049-3491 401573 (workdays after 4 P.M.), e-Mail: NorbertOpitz.Wittenberg@t-online.de

Postcard survey results

Is it really an improvement? Last year we received 19 answers to our survey and this year it was at least. This means from around 55 members not quite 40% answered and that for the one and only big request that I make to the members year for year. Unfortunately only 7 of the 21 answers contained an opinion about the best program of the year 2001. Last year there were at least 11. I'm sorry but this is too few to be representative and so the vote will have to be dropped this year, but more about that later.

As the results of the survey for Computer- and Diskette systems is only interesting if the number of replies is representative of the whole we can only pick out the points which have meaning and character for the whole Spectrum scene:

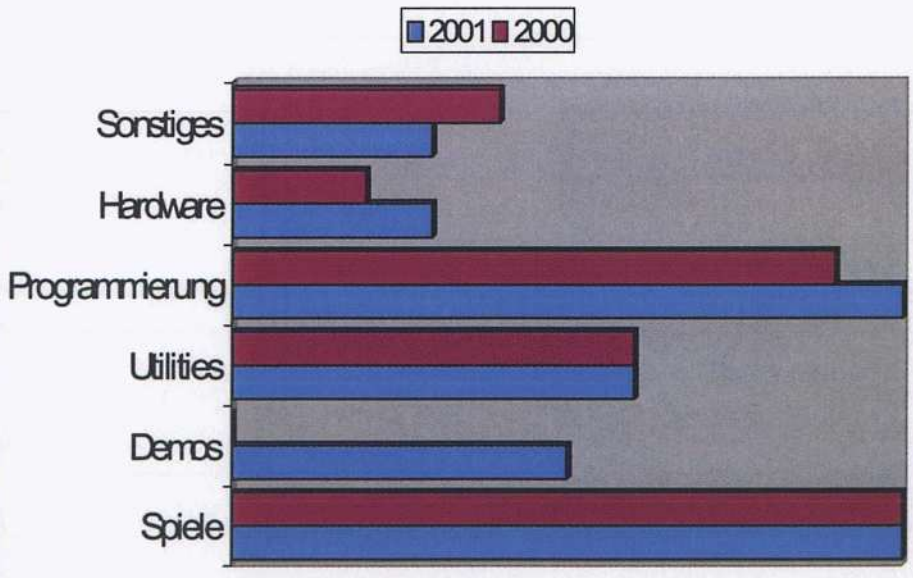
Games 7
Demos 5
Programming 10
Music
Chess
DTP
Interface DIY
Database
Adventures 2
Keep Going 2
Word Processing 2
Utilities
Hardware 2
Nostalgia

The same here, not everyone has unfortunately answered, for those that sent back the cards were were other cards with multiple-choice which have been included. I have taken the liberty of combining some subjects, what's left are the following categories:

(The number in brackets gives the count for the previous year in the same category)

Games (Games, Chess, Adventures)	10 (10)
Demos (Demos)	5 (0)
Utilities (Music, DTP, Database, Word Processing, Utilities)	6 (6)
Programming	10 (9)
Hardware (External Controls, Hardware)	3 (2)
Other (keep going, Nostalgia)	3 (4)

Interesting is that for most of the categories there is little change, only a taste for Demo's seems to have increased. We hope that we can do justice to the trend and present first class Demos in Scene + .



Auswertung Postkartenaktion

As mentioned previously the selection of ‚Best game' has had to be dropped. The few readers who bothered to cast their vote chose for the most part different programs, other replies couldn't be counted, for ex. 'All Demo's' which didn't help us is making a selection.
Here at least some of the names that were mentioned:
Solitaire, Rock´n Roller, 4 Channel Music Top Ten, Tango, Magic Fields, Magic Dice, Pussy, Profoundly not funny Demo 128, First Association, Atrog, Towdie, Curro Jimenez.

So as you see a colorful selection from demo's and games, even LCD´s pictures got a mention. Noticeable is that the thinking games which have always been popular on the Spectrum were especially well liked, also Solitaire, Tango, Magic Fields, Pussy. The last wasn't even published in 'Scene' (only a demo version) but is never the less one of the highlights, even though it in fact came out in the year 2000.

And last but not least came the question about the separation of SUC-Session and SCENE+. This question was answered by almost all who replied:

Very good	5
Good	9
Poor	2
Very poor	1
No opinion	1

In total this new concept was accepted as being a good one. Our objective was and is to make even more readers enthusiastic about our club. Also because of the low level of support ex. As with this questionnaire the impression is that most are not interested in SCENE+, just see the votes for the best program. Taking account of that it could be interesting for some just to take SUC-Session and not the SCENE plus which they are not interested in looking at. In reality we have seen that almost no readers have cancelled their copy of SCENE+ , however a number of readers have never the less used the separation to take SUC-Session in it's paper form (can be read anywhere) and SCENE+ as a download. Each to his own taste. For those who find the separation a bad idea, well nothing has to change we still the Packet offer so that you get both together, and that will continue so in the future..

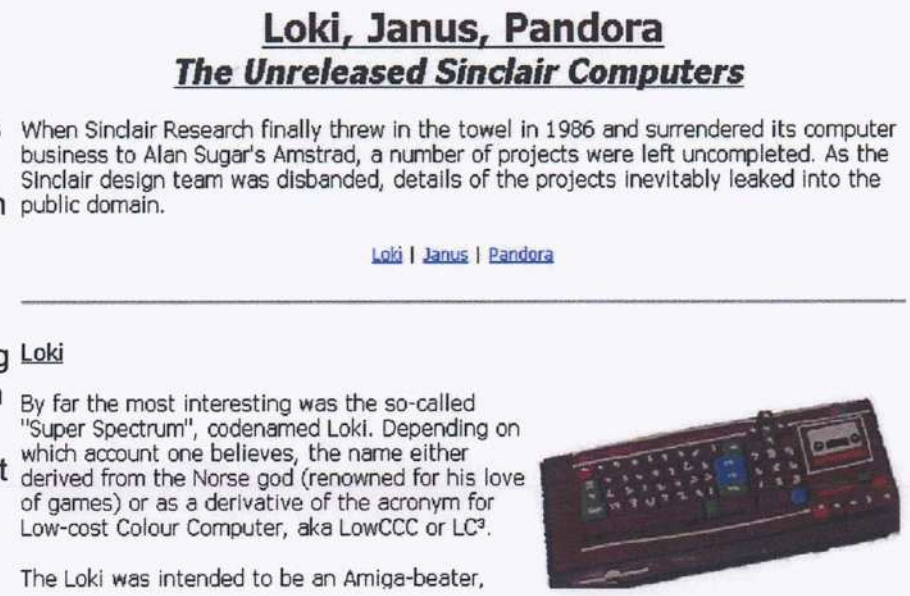
I wish and hope that next year there will be a higher level of participation in the survey. Those who are of the opnion that they can't remember the program's from the whle year can at least through the year make a note of the Games/Demo's which they especially liked and then they won't have to search through all of the diskettes at the end of the year. On the subject of 'All the Diskettes', well it is only 6, too many? Not for a Spectrum user or? I don't believe that of any of our readers.

And in this vein, you are allowed to improve!!!

Thomas

Stars on the Internet

And once again to unknown worlds in the wide expanse of the Internet. Wait, stop, this site's not so unknown....or?
http://www.nvg.ntnu.no/sinclair/computers/loki/loki.htm



Yes of course, it's the pages of Planet Sinclair, more exactly a part of them, which are though very interesting. Planet Sinclair has a very large selection of pages so even I could learn something new from them. This section concerns the un-publicised Sinclair computers. The best known is of course Loki, over which much has been said, so that it's no longer possible to believe everything. At least the information on this site seems to be believable and It's also possible to learn that the Atari Jaguar is at least a distant relation of the Spectrum. As well as that there is information about Sinclair computers that I have never heard anything about such as Janus and Pandora. Something for Sinclair-Lovers, but interesting...

After this flight through the universe lets dive into a cave... the Sinclair cave
http://www.waddington.fslife.co.uk/

„The Sinclair Lair" has been created by James Waddington, who drew attention to himself during the 90's with his magazine Spellunkler and also for "Classix". He admits to loosing interest at times but now he's back full-time. As well as articles from his old magazine Classix he is offering again the Game-Search-Service which he also had on offer some time ago. His offer is to use his contacts to find the location of any Original game you are looking for. There are also parts from his activity with Adventure-Magazine, so we find various adventure solutions. Last but not least there are a few programs to download.
What's great about the site is that it is obviously updated regularly. A sort of News column shows what is happening around the computer and Sinclair himself. Other than that it's built on nostalgia and anyone who has all of the issues of Classix and Adventure won't find much new here.

Although I've know about them for some time, up to now I have never taken a look:
http://www.ysrnry.co.uk
„The Your Sinclair Rockin Years". A mistake not to look at this site sooner, because what they are doing here is really classy. Not only that you can find information about the best Spectrum magazine "Your Sinclair", with nearly all of the issues listed, with cover picture and the articles (partly scanned) and links to where you can download the cover tapes. Added to that there are a number of their own columns such as the Movie-column in which the author shows some really good publicity films about the Spectrum. Technical and information content great, highly recommended.

That's it again folks. Again without your help I have written an article about the Spectrum in Internet. To-date I unfortunately have not received a single tip, informing me of a site to visit, that is apart from a couple of hints from Leszek, but then he belongs to the editorial staff.
So, if you discover a site that looks interesting and you think others should know about it, then write to me: sintech@online.de
Thomas

Speccy-DOS Emulator v1.01 released

A few years back not many people knew about Beta-128. The same is true of the D40/D80 system and I'm sure that you don't yet know anything about SpeccyDOS, even though the name may give you a clue.
The SpeccyDOS Interface is a really powerful disk system that appeared for the Spectrum 48/128 in Hungary around the middle of the 80's. When I think back then I also remember SpeccyDOS was a very fast system. Standard 48k Programs load (or charge) into the Spectrum RAM in only 2 to 3 seconds!
Sure, this sort of speed was for the time very unusual and not just when compared to cassette but in comparison to the C-1541 Commodore Floppy it was really fast. And when you use it with the new modern drives then it is even faster! Anyway for a long time no-one heard of this device and many Hungarian fans didn't realise that it supported 3.5 inch floppies. That is till now.
It's taken a long time but now the we have the SpeccyDOS Emulator. Edy from Tritonus2kSoftware (A one time member of the Speccy Coder Group WSS in the 90's) wrote SDemu. Now after the removal of a few bugs the Version 1.01 has appeared complete with English documentation.
A few words to SDemu: It can't be seen as an emulator in the classical sense, as it doesn't run programs from an SD-Diskette, it only offers the option to work with the diskettes. But that isn't all it's more than a simple diskette converter. The main function of

Version 1.01 is to read SD-Diskettes and store them onto a Hard-disk. So with this it's possible to save the contents of an old and dusty diskette, which is a very useful function for us. The next version should contain the possibility to write the contents back to a diskette. Later it's planned to integrate the whole thing into a Spectrum emulator.
The system requirements are minimal, it's not necessary to buy a new PC to run Sdemu. At the moment the emulator runs in 16-Bit DOS Mode and also works in windows compatible mode. A Linux version is planned for the future.
SDemu gives us a new development in the Speccy-Welt. For those who haven't yet had enough of the various disk formats with this one you have another. The new image files use the extension .SDD (Speccy-DOS-Disk).
Even though the commands have to entered in a single command line with parameters they are easy to use. 3 small but different .exe-Files are responsible for carrying out the command for the SD-Disk and Image files:

MOUNT.EXE to recognise and read in the SD-Diskettes and to convert them into SDD-Files on the hard-disk.

LIST.EXE is used for both diskettes and image files and lists the contents either to the screen or a text file.

LOAD.EXE converts real diskettes or image files into .TAPfiles. Whereby all of the SD-Programs are converted to one TAP file. So then it's only necessary to load the .TAP file into an emulator of your choice.

For more information visit the homepage and the download-section. You won't only find the emulator and the instructions there but also a number of .SDD image file with classical games and a number of demo's from the former WSS team. Internet address: Tritonus2k Software: http://www.t2k.hu/sdemu/eindex.html
E-mail to Edy: edy.wss@freemail.hu

Richard Tarjan, Hungary
(trichard@journalist.com)

Sintech grows

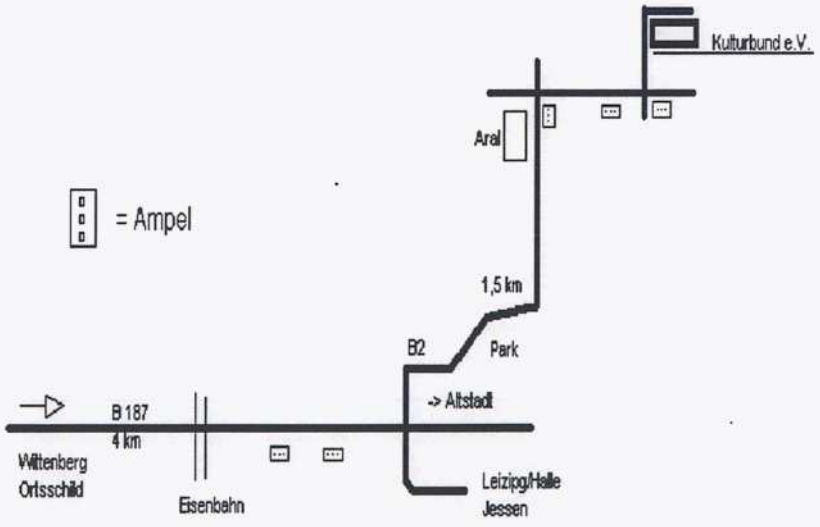
After long preparation finally the times has come. Now Sintech is not anymore just a side-line job for me, since 01. July it is my main job. Although the Spectrum sales are the biggest posts at Sintech, I can of course not live only from these. Therefore I included further systems like Playstation, PC or Atari VCS in addition to the traditional 8- and 16-Bit offers. My goal is to increase the offer to reach more customers but never forget the roots to the Spectrum.
So if you have anything computer-related you want to buy, you can ask at Sintech also when it is not something for your Spectrum. As my costs are low I can often offer cheaper than others. Also now you can combine your Spectrum-order with other systems, for example PC and Spectrum.
Just have a look for our new offers: http://www.sintech-shop.de
We also have a lot of new Spectrum offers there for you.

Spectrology in Wittenberg
14 + 15 September 2002

The dates are fixed for the regular yearly Spectrum-User-Meeting in the well known Luther town Wittenberg:

14. + 15.09.2002 (starts from 10.00 o´clock, open end)

After the success of last year and perhaps at last the breakthrough for a meeting in East Germany, we are hoping for success again this year. There are no special events planned for the 20 year jubilee, as always the emphasis is on a coming together and the exchange of information. Of course there is a call for everyone to bring their Spectrums with them.
Here is a description of how to get there:
The meeting is in the rooms of the Kulturbund e.V. Wittenberg which is in the Schulstrasse 68.
Directions: Wittenberg lies in Sachsen-Anhaltat the crossing of the B2 and B187 on the Elbe. Most participants will arrive via the BAB 9 (Motorway nr.9) , from this you have to take exit nr. 8 (Ausfahrt 8) - Coswig to the B187 and then to the right through Coswig and Griebo to Wittenberg (ca. 15 km). After the town sign at the entrance to Wittenberg it's about 4KM to a two track rail crossing, after this take a left at the second traffic light onto the B2 in the direction of Postsdam (stay in the left lane after crossing the railway tracks). The follow the high street (Hauptstraße) (ca. 1,5 km) until you see anb ARAL-Petrol station on the left hand side. Just after this is a traffic light, take where you take a right into the Annendorfer Strasse. Go down this road and at the 2nd traffic light go left into the Schulstrasse. This goes lightly uphill for about 500m and after the climb on the right hand side is a two story building with a yellow sign with the black printing „Kulturbund e.V.". We have arrived. The entrance to the building is in the direction you were driving behind this. If you are coming by train, get out at the Wittenberg Main station (Hauptbahnhof) which is on the line Halle/Leipzig to Berlin and take a taxi from there (ca. 4,00 Euro) or walking it's about 3 km.



Various rolls, Coffee etc. are usually offered by the Kulturbund. Anyone who wants to stay the night should tell Norbert in good time, so that he can make a booking for all of the Spectrum-Users in a hotel at one time. The prices last year were around 37 Euro per Person in a single room or 50,00 Euro for a double roomf. Of course the more people wanting to overnight the better the change of a group rate.

Contact addresse in Wittenberg: Norbert Opitz, J.F. Böttger Str. 7, 06886 Lutherstadt-Wittenberg. Tel.0049-3491/401573. On weekdays please call after 4P.M.
Or e-Mail: NorbertOpitz.Wittenberg@t-online.de

New Operating System „H1.0“

sent in by Thomas Schwarz

Last year I updated a system from „Friend 5.0“ to „Husband 1.0“ and now I find that the new program has made changes to my accounting software that I couldn't have foreseen, it has especially restricted my access to the programs “Clothes”, “Flowers” and “Jewellery”, which had all worked exceptionally well under „Friend 5.0“ . Nothing is mentioned about this in the handbook. Not only that but “Husband 1.0” has de-installed a lot of useful programs such as “Dinnerdancing 7.5“ “Shipscruise 2.3“ and “Operanights 6.1”. In place of these it has installed totally useless programs such as „Pokernight 1.3“,“Saturdayfootball 5.0", „Golf 2.0“ und „Untidy 4.5“. „Conversation 8.0“ has also stopped functioning, instead, every time it causes a system crash. I have no chance with „Nappychange 14.1“ or „Housework 2.0“ . I've tried running „Grumbling 5.3“ , but even this useful general purpose program couldn't achieve anything. Please help me!
Jane

Dear Jane!
These are problems which often appear and are usually reported by women. They are however based on a fundamental misunderstanding. A lot of people upgrade their system from „Friend 5.0“ to
„Husband 1.0“, without thinking that „Friend 5.0“ is a leisure program. In comparison „Husband 1.0“ is an Operating System and has been so set up by his programmer so that it is compatible with very few other programs.

Additionally you can't simply de-install “Husband 1.0” and go back to using “Friend 5.0”, as that is not foreseen in “Husband 1.0”. Particular hidden files in the system will cause „Friend 5.0“ to re-create „Husband 1.0“, so that you won't win anything. It simply isn't possible to delete, de-install or change “Husband 1.0” once it has been installed on your system. New programs can only be installed once a year as “Husband 1.0” can only use a limited amount of memory. Error reports are normal and an integrated part of “Husband 1.0”. In desperation some women have tried to re-install old favourite programs (or new, interesting programs) in that they have tried to run “Friend 6.0” or “Husband 2.0”, unfortunately the result of installing these programs is often even more problems than with “Husband 1.0”.

Read your handbook information for the module “Divorce/Maintenance”. You will see that these programs are very unreliable and work only in combination with the program “Heartbreak 1.3”. Our recommendation: stay with “Husband 1.0“ and find ways to get round problems in this illogical program. As I have installed “Husband 1.0” myself I can only recommend that you study the chapter on General Partnership faults (PF). This is a very useful Help program, which runs in the background and is an integrated part of “Husband 1.0“. Through this „Husband 1.0“ has to take complete responsibility for ALL faults and problems concerning the program even when these have been caused by the user. This Help program can be called up with the command: C:\I_thought_you_loved_me“ .
Sometimes it's necessary when inputting the command to also run the program „Tears 6.2“ in the background, to get the utility started. As a rule „Husband 1.0“ reacts to this by starting the program „Sorry 2.3“ und „Flowers+Chocolate 7.6“.
Technical-Tip: Don't call-up this utility too often. Misuse can cause further PF's and cause you to have to input a „C:\Sorry“, before „Husband 1.0“ will continue normal operation. In

extreme cases misuse can cause "Husband 1.0" to call up the program "Day_in_day_out_muttering 2.5" or what's worse to shut down the system to "Silent_Couch_Sitting 6.0". In this Operating condition program „Husband 1.0" produces „Fatbelly-Files" and „Snoremusic-Wavefiles", which can only be removed from the system with difficulty.
Instead follow this technical tip:
Always think that: The system automatically takes responsibility for all PF's and runs for the most part as you expect it to. Through this resource intensive operation it has to be remembered that „Husband 1.0" has only a limited possibility to call up and run programs that were automatic under „Friend 5.0". „Husband 1.0" is a super program. It has though only limited memory capacity and a restricted learning capability. However with clever choice of accessory software it's possible to increase the system performance significantly. Personally I would recommend „Cooking_Skills 3.0" or „Underwear 5.3" and „Patience 10.1". If you run all three accessory programs at the same time then "Husband 1.0" gears up to high-performance levels. After a number of years you will get to know the program „Husband 1.0" better and discover many worthwhile features such as „Plumber 2.1", „Cuddle 4.2" und „Bestfriend 7.6".

One last warning NEVER install the program „Motherinlaw 1.0", after you have activated „Husband 1.0". „Husband 1.0" is not compatible with this program and will shut down part of the operating system. The only parts still running will be „Fishing 6.4" and „Pub 5.2". However if you remove „Motherinlaw 1.0" then „Husband 1.0" will return to it's normal operating condition.

I hope that this advice has helped you further. Thankyou for purchasing „Husband 1.0".We of the Hotline wish you lots of success in the future. We are sure that over the years you will learn to control our product better!

Hardware-Corner

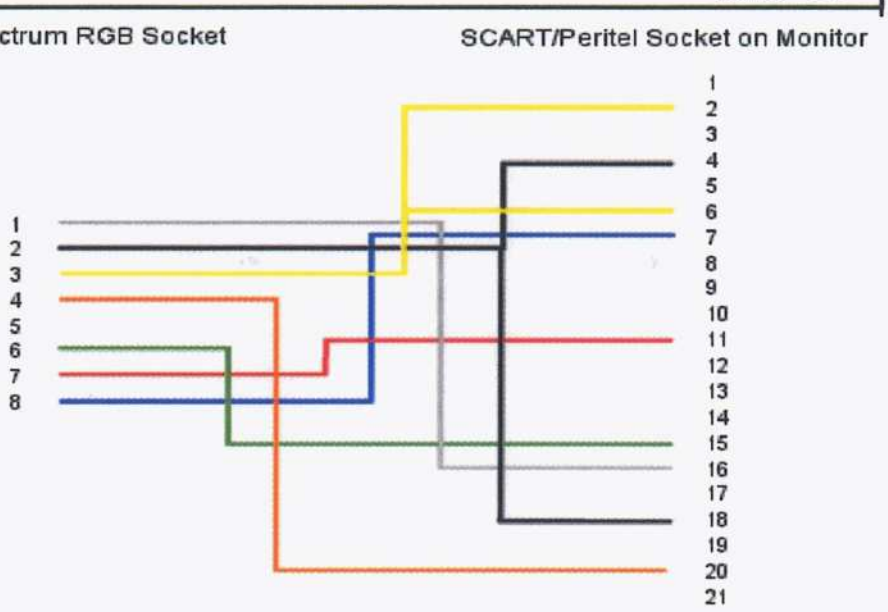
Monitor-Cable for the Spectrum +2A / +3
from Adam Short

In addition to the article about a monitor cable for the +2/128k from Paul Farrow, Adam Short has sent us his experiences with a cable for the Spectrum +2A/+3:

The +3 RGB cable is a lot simpler than that for the +2/128k. The +3 outputs signals in exactly the form expected by an RGB-Monitor (Ex. a Philips CM8332), so no extra components are needed. It's only necessary to make up a cable with an 8-connection DIN plug and a SCART-plug and it works perfectly. I used a SCART-cable with 9 wires. We only need 7 so using a thicker cable would be a waste.

To make up the cable it's only necessary to connect Pins 6, 7 and 8 from the Spectrum (green, red, blue) with Pins 11, 15 and 7 of the SCART-cable. And then Pin 1 (+12V) to Pin 16 (Select signal) and the ground from Pin 2 to Pin 18 and if someone wants to connect the sound-pins (why not), then this ground signal also goes to Pin 4 of the

SCART-cable. Pin 4 (Sync.) connects to Pin 20. And last but not least anyone who wants too can connect the sound signal from Pin 3 to Scart Pin 2 and 6 (Audio left und right).



That's it. Simple or not ? My thanks go to the guys from Comp.sys.sinclair, who helped me make this cable, especially Fraser Ross, who explained to me the real meaning of the Select and what you have to do with this infernal 12V signal.

Adam Short

Power supply for MB 02 and Spectrum
From Norbert Opitz

At the Spectrum-User-Meeting in Aidlingen two of the power supplies for my Spectrum +3 and MB02 went up in smoke, even today I don't know what the reason was. So after a quick look inside the power supplies I decided on a radical cure and removed all of the electronics. The „H"-form heat-sink and the available room brought back to me my old idea to run the MB 02 and Spectrum from one power supply.
From the old circuit board there only remains a printed circuit connection to the transformer and the „H"-form heat-sink has been reduced to it's individual plates. The new circuit board is a perforated board with solder points. The power supply now produces 3 voltages, 5V / 2A and 12V / 0,7A for MB 02 and
7,5V / 2A for the Spectrum.
The 7,5V are enough for the Spectrum, as the original power supply without voltage stabilisation was constructed for reliability and affordability. Due to the reduced voltage the Spectrum doesn't generate as much heat. The individual voltage paths are simply created. The rectification takes place using 3A rectifiers, and the voltages are stabilised using the positive 78Sxx voltage regulators for each value and electrolytic capacitors on the input and output of each circuit. For the protection of the computer and MB02 each voltage is supplied via a fuse combined with different coloured LED's to show that the voltages are present. I think the circuit is explained with the accompanying diagrams.

The already available low voltage cable had enough connections for both the MB 02 and the Spectrum.
A 12 volt fan built on top of the power supply sucks out any heat which is generated. Without the fan you can just touch the case without burning your fingers. In a lengthy test

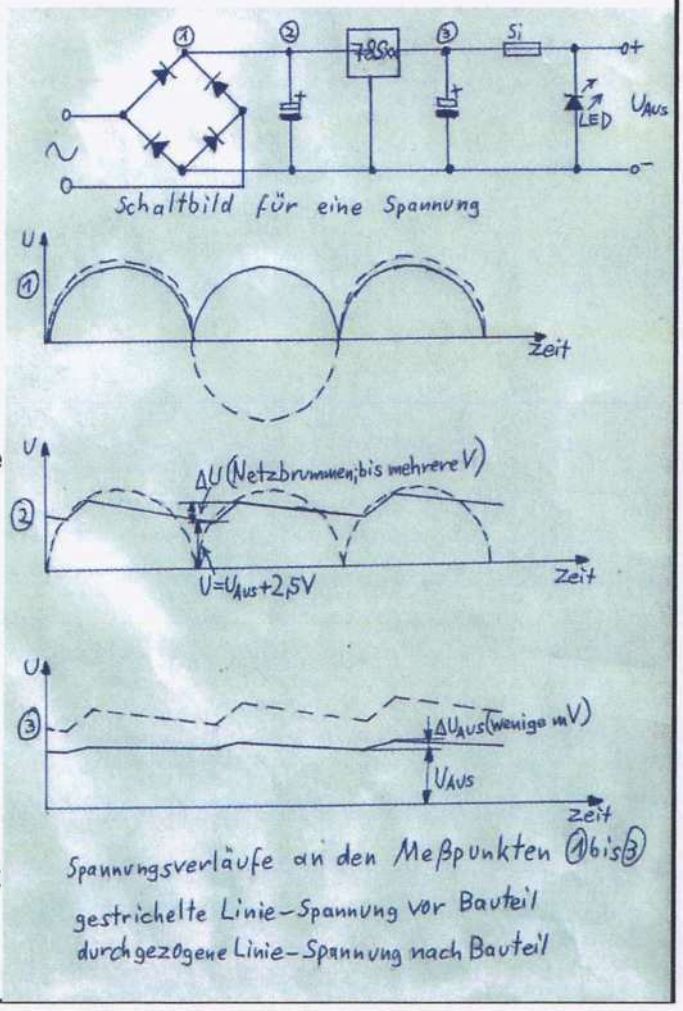
at the meeting in Urmond(NL) there was almost no heating of the case with the fan running.

Component	5V	7,5V	12V
Rectifier	all rectifiers 40V / 3A		
Electrolytic capacitors each 35V (twice)	in Microfarad 2200	2200	1000
Voltage Regulator	78S05	78S75	78S12
LED with integrated resistor	red	green	yellow
Glass fuse	3.15 A	3,15 A	1,25 A

I think that anyone experienced in home-brew would have no problem duplicating this power supply. Anyone who doesn't own a +3 power supply could build it with other combinations of case and transformer, As I'm going to do for running the Spectrum at home.
The costs for the components used and built into a +3 power supply are around 15.50 Euro's (about 9.75 pounds) (without fan). In Germany the parts are available from Conrad and in England from Maplins.
For questions here is my address:

Norbert Opitz
J. F. Böttger Str. 7
06886 Lutherstadt Wittenberg
Tel.: 0049-3491-401573 (workdays after 4P.M.)
e-Mail: NorbertOpitz.Wittenberg@t-online.de

Editors notes: Norbert runs his Spectrum +2 and eventually also his 48k Spectrum with this circuit but not the +2A. Additionally we would like to draw everyone's attention to the fact that neither the author or the editor guarantee that the changes to the power supply described in this article are the best for the computer. In a case which I have I'm personally of the opinion that it is worthwhile to feed the 12V and 5V directly via a new socket on the Bus-port, so that there would be no heat generated in the Spectrum itself by the voltage regulator. But that is just my personal opinion, as I have realised it in the past with PC power supplies, however I don't know if it is the best possible solution.



Box of Routines

Hi Freaks!!
When someone like us dives into the subroutine box we are likely to come up with some useful programs and it's such a program that I want to look at today. It's called INTERSCRIPT and was written by Dirk Zweers. INTERSCRIPT is an interrupt controlled sliding text banner routine, which allows while running a program to display information text on the screen.
INTERSCRIPT has a number of advantages such as:

Can be freely placed anywhere in the memory (however only runs on the Spectrum 48K, as a number of variables are placed in the memory area between 65524 und 65535)

- Position and width of the moving text (Window position) can be freely selected
- The location of the text is not fixed to any particular address
- The routine doesn't slow down the running program by much, as it is interrupt controlled and even the Scroll-Routine isn't affected
- The typical interrupt table for this type of routine isn't used as the program has been very exactly written for just the hardware and software environment of the Spectrum
- Continuous control of the text as it is displayed with the possibility to change another text at any time
- After reaching the end the routine automatically jumps to the start again
- The routine can be switched off at any time

When you look at these points more closely then you can see that a lot has been packed into this small routine. The BASIC listing I've attached to this article with create the necessary machine code and includes a small demo text version. When the MC-part is at address "X" then you have to select the print position which looks something like this:

RANDOMIZE USR X: PRINT 0,7,13

Which means the following. The moving text will appear on the screen from PRINT-Position 0,7 with a width of 13 characters. The first number (in the example 0) can be between 0 and 23, the second between 0 and 31 and the third between 1 and 32. This is logical if you know the display parameters. If the second or third value is outside of the parameters then there will be an Error report A - Invalid Argument. When you have created a text and poked it for example from Address 32000, it's necessary to give this address to the program:

RANDOMIZE USR 64002: PRINT 32000

Where 64000 is an ideal address for storing the routine. With this we have set the text pointer to the text we want to output. The end must be defined with CHR$ 255 (COPY), This is most easily done, for example if the text is in x$ by adding the following line:

LET x$ = x$ + CHR$ 255

To poke the text into memory the following small routine works well:

FOR a=l TO LEN x$: POKE a+(b-1),x$(a): NEXT a

Of course the text we want to use must be in x$ and b is the start address where the text is to be stored. I should now point out the routine cannot print TOKENS and only uses the Character variable CHARS. So that makes it possible to use various character sets. Then up to 255 character (though 255 is the end character) can be output. The text to be poked can of course be any length depending on the memory available. When all of the values have been initialised then

the routine can be started with RANDOMIZE USR 64004. With that the interrupt is activated and everything starts. It can all be stopped with RANDOMIZE USR 64006. To find out where the routine was in the text (useful, especially with long texts) you can use the following instruction:

LET Z=USR 64000

Z (or any other variable we want to use) contains the address of the next character to be output.

That's enough of how we control the routine „INTERSCRIPT" and now the listing for you to type in.

Perhaps you or someone else can find a good use for this routine in their program. Anyway we wish everyone lots of fun when trying it out. See you soon again here in Info ...

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(Editors comment: I used Interscript to write my first Demo's. Today I use my own routines but Interscript was a beginning...)
The Listing:

```
1   INPUT „STARTADRESSE ? „;A
2   FOR B=I TO 25
3   RESTORE (B+20)
4   LET C=0
5   FOR D=I TO 10
6   READ F
7   POKE A,F
8   LET C=C+F
9   LET A=A+I
10  NEXT D
11  READ G
12  IF C<>G THEN PRINT FLASH
    1;"ERROR IN DATA LINE";B+20'
    „CHECKSUM READ: „;G'
    „CALCULATED VALUE: „;C:
    BEEP .I,0: STOP
13  PRINT AT 0,0;"DATA LINE
    „;B+20;" 0.K.": BEEP .I,10
14  NEXT B
15  GO TO 9999
21  DATA 24,49,24,119,24,7,24,
    38,237,75,621
22  DATA 251,255,201,243,17,
    137,0,197,225,25,1551
23  DATA 34,245,255,62,195,50,244,
    255,62,24,1426
24  DATA 50,255,255,62,59,237,
    71,62,8,50,1109
25  DATA 254,255,237,94,251,201,
    243,237,70,251,2093
26  DATA 201,223,231,62,3,
    245,231,205,130,28,1559
27  DATA 205,153,30,241,197,61,
    32,243,193,121,1476
28  DATA 167,40,21,111,254,
    33,48,16,193,89,972
29  DATA 129,56,11,254,33,48,7,
    193,121,87,939
30  DATA 254,24,56,2,207,9
    ,125,50,253,255,1235
31  DATA 131,95,213,193,120,
    15,15,15,230,224,1251
32  DATA 129,111,120,230,24,
    246,64,103,43,34,1104
33  DATA 247,255,201,223,231,231,
    205,130,28,205,1956
34  DATA 153,30,237,67,249,255
    ,237,67,251,255,1801
35  DATA 201,245,197,213,229,221,
    229,253,229,255,2272
36  DATA 243,42,247,255,6,8,
    58,253,255,79,1446
37  DATA 197,229,203,22,43,13,
    32,250,225,203,1417
38  DATA 134,36,193,16,241,58,
    254,255,el,50,1298
39  DATA 254,255,32,52,62,8,
    50,254,255,237,1459
40  DATA 75,251,255,10,254,
    255,32,10,237,75,1454
```

```
   41     DATA 249,255,237,67,251,255,24,28,3,237,1606
   42     DATA 67,251,255,111,38,0,41,41,41,237,1082
   43     DATA 91,54,92,25,237,91,247,255,6,8,1106
   44     DATA 126,18,20,35,16,250,253,225,221,225,1389
   45     DATA 225,209,193,241,251,201,0,0,0,0,1320
8999    REM   INTERSCRIPT DEMO!
9000    LET A=PEEK 23728+256*PEEK 23729: REM GET MACHINE CODE ADDRESS!
9010    LET A$="This is a demo of Interscript, which should show you what is possible
        with the program!  Even the special characters <>!$&/()=  etc.) can be printed,
        as well as any user defined characters!!!": REM Define text to be printed !
9020    RANDOMIZE USR a: PRINT 23,7,16: REM The text should be scrolled from
        Position 23,7 and is 16 characters wide
9030    IF a>=60000 THEN LET b=32000: GO TO 9050: REM When storing the text there
        must be no collision with the MC (Start address is after all variable!)
9040    LET b=61000: REM when the MC lies below Address 60000!
9050    LET a$=a$+CHR$ 255: REM add a 255 end marker to the string!!!
9060    FOR c=1 TO LEN a$: POKE b+c-1,CODE a$(c): NEXT c: REM ..... and poke it
        to memory!!!
9070    RANDOMIZE USR (a+2): PRINT b: REM Supply the address of the string. It
        could be the real address of a$ if we wanted !!!!!!
9090    RANDOMIZE USR (a+4): REM The last thing switch on the interrupts!
9100    LET z=USR (a+8): IF z<b+LEN a$-1 THEN GO TO 9100: REM Wait until the string
        has been completely printed
9110    RANDOMIZE USR (a+6): REM Switch of Interrupt!
9200    STOP
9999    LET A=A-250: LET AH=INT (A/256): LET AL=A-(256*AH): POKE 23728,AL:
        POKE 23729,AH: CLEAR : LET A=PEEK 23728+256*PEEK 23729: PRINT AT
        10,7; „SAVE !": SAVE „INTERSCRIP" LINE 1: SAVE „INTSCRCODE"CODE
        A,250: PRINT AT 10,0; FLASH 1;"          VERIFY !          „:
        VERIFY „INTERSCRIPT":  VERIFY „INTSCRCODE"CODE A,250: RUN 9000
```

Everything is possible with the Speccy?

When most people think back to the early days of the ZX Spectrum most of them remember it purely as a games machine. Those who keep up with the newer history of the Spectrum know that the Russians have built many different Spectrum clones instead of building PC's because otherwise the cost would have been too high.
Through that, something interesting has happened: As the Speccy was the only computer available to millions of people in the ex-USSR during the 90's it was used for all sorts of applications, which were carried out in other countries by PC's. It is difficult to believe that other than playing compressed multi-media files it was possible to surf the Internet, and that with a 128k Spectrum which had only a diskette drive.
Anyone who flicks through the programs should remember: it's only a small part of what's available as modern ZX Software. The most useful internet pages to look at for really great software are those from Power of Sound, P.O.S. for short and well known in the

Spectrum world as the developer of the TR-DOS 6.xx Version, before they created their pages. (http://pos.izhnet.ru).
Ok, lets look first at the screens. The spectrum can read most of the common formats. Of course because we have memory size problems most of the programs are what is called single-format viewing programs. So it's not difficult to guess what programs such as JPEG-Viewer or BMP-View are used for in Russia...
The standard format for these viewers on the Spectrum is 256 x 192 with 2 colours. The results are surprisingly good: a 16,7 Million colour JPEG is reproduced on the Spectrum in acceptable quality. It is very similar to the PC-Format in 320x200 Pixel resolution with 2 colours.
Those of you who know the clones also know that they have expanded possibilities when compared to the original Spectrum. Some of them are capable of 512 x 192 or even 512 x 384 Pixel resolutions. I've even heard of a 128 colour version of the Pentagons / circuit diagrams of how to upgrade a computer to this standard and we can expect to see Graphic-Editors/Viewers that will support these „Super-Pentagon". We wait for the first pictures...
The same thing can be said about sound. Of course it's not possible to play MP-3 files on the Spectrum, but other well known formats are supported. MOD-Player is a player program for the 4 channel module that started life on the Amiga. Excess Sample Editor is there to play .WAV files and to edit them. As you would expect the speed of the processor has a significant effect on the quality of the sound. With a standard A/D device (such as Covox, Stereo Covox and Soundrive) it's possible to play as a max. 11-13 KHz Samples on a normal 3.5 MHZ Spectrum, depending on which player program you use. Naturally with a 7 MHz Turbo Machine the sound is twice as good.
It's even better with the General Sound Card. The integrated 12 MHz Z80 can turn the Spectrum into the most powerful 8 Bit sound machine and handle samples with 37.5KHz!
ZX and Internet. Sounds like a fairy story, or not? For those who want to use the rubber keyboard for their e-mails well that's already possible! A number of firms still support access via an old 1200 baud VTX modem, ex.. the Arcade BBS or Silicon Valley. Surprising is that these old modems were not sold in Russia but today in Great Britain and in Versions for the 48k and 128k Spectrums.
The biggest open question of course remains, whether we will ever get a web browser for the Speccy. To write a simple HTML- converter is not all that difficult, as a number of modern programs prove by displaying their instructions or help files in HTML format. The main problem is with the compressed pictures (GIF, PNG and JPG).It would take on average about 60 seconds to display a typical picture from the internet. But I have heard that the developer of the Speccy JPG decoder in Samara are already working on a faster algorithm. It's certainly possible to increase the speed by a factor of 3, but even that would take 20 seconds... If we want a browser for the Spectrum then we first need to create Spectrum-Home pages with just 2-colour pictures, or even better as un-compressed .SCR screens. These a necessary steps, or we can forget our dreams of surfing with the rubber keyboards. It's up to us...

Richard Tarjan
Ungarn

CF is here again!

We've reported this once before, but this time it seems to be true. The Computer-Fleamarket is here again. This newspaper was once one of the main reasons why the 8 bit scene could exist for so long in Germany. Through the medium of this magazine of small-ads and discussion forums it was possible for computers, including the Spectrum to have a communications platform outside of the clubs. A number of years ago the magazine was shut down, there was too much discussion and too few readers. Basically I believe that through the On-Line auction houses too much of the market was taken away. Now it's possible in cooperation with the magazine GO-64 for it to return. Whereby one half of the magazine will be the small-ads and the other half the C64 magazine. Therby sharing the publishing costs and allowing them access to the magazine sales racks. The forthcoming issue July/August should be in the shops now and includes a couple of general 8-bit articles.
The price of 4,90 Euro (About 3 pounds) is rather high but necessary because of the publishing costs.
Anyone can place a small-ad by simply selecting a Category (Rubrik) number and either Selling (Biete) or Buying (Suche). An ad could look something like this:

Category: 03000 Buying
Looking for everything about the best computer in the world the Sinclair Spectrum. Tel. 0000

The complete ad is then sent by e-mail to cfm@cf-m.de or per Post to Dr. Heide & Partner GmbH, PF 68 01 54, 10265 Berlin, or Fax: 030 474 692 26

Now you need the Categories:
Sinclair Spectrum

03000 Hardware B/S
03010 Accessories B/S
03020 Software B/S
03030 Documentation B/S
03040 Programing
03050 Exchange of experience/Contact
03060 Other

An active scene would of course help a neutral reader to decide to join us. So write a little in CF.

Computer Nostalgia

The latest news comes from the Joyce-User-AG e.v. They have suggested bringing out a German language magazine for all of the Nostalgic-Computers, it should be called „Computer Nostalgia". The computer clubs should deliver articles relevant to their computer. The idea is not for the clubs to give up their own magazines but just to deliver a magazine for all Nostalgia fans. The sale of the magazine should be via the clubs. Whether it can be a success depends on the reaction. Send these to us or to Joyce-User-AG, Fax0049-721-151248920 or e-mail info@joyce.de

New:	
PC-PSU with supply for 2 Floppies and MB02	36,00 €
MB02-Printerlead	13,00 €
****NEW: IDE-KIT (DIY) for MB02 (please ask for offers in CD-ROM or HDD)**	**26,00 €**
Spectrum +2A, new and original package, complete	220,00 €
Again available (low stocks): Didaktik Kompakt 48k	**154,00 €**
Again available (low stocks): Didaktik Kompakt 128k	**213,00 €**
Diskinterface D80 + Flopppy for Didaktik or Spectrum	111,00 € KS
B-Laufwerk for D80	60,00 € KS
Proface AT Extern (Keyboardinterface for connecting PC-Keyboards to Spectrum)	55,00 € KS
Proface AT intern	52,00 € KS
Melodik AY-Soundbox (unboxed)	21,00 € KS
128k upgrade Kit for 48k (only Hardware Specialists)	21,00 € KS
128k upgrade Kit incl. building inside (send Spectrum board)	52,00 € KS
+2 Cassetterecorder	36,00 €
Floppy Disc drive (1,86 with MB02, 720k with Opus, 780k with +D) Please specify	24,00 €
PSU for +2A/B and +3 or PSUI for +2 (also 48k and 128k) Please specify	31,00 €
FDD lead for 2 drives	4,00 €
Microdrive	25,00 €
Multiface 128 (working also on 48k)	26,00 €
Dust Cover 48k+/128k	8,00 €
Keyboard membrane 48k	11,00 €
Keyboard membrane Spectrum +/128k, new quality, not aging	21,00 €
Printer Ink Ribbon original STAR LC 10 , Doublepack 2 pieces	11,00 €
Plus 3 Tapelead	8,00 €
Spectrum +2 Lightpen	36,00 €
Spectrum +3 Lightpen	27,00 €
Silverpaper for ZX Printer	8,00 €
Phaser-Pistole with Software (Tape or +3)	20,00 €
****NEW: Keyboard stickers for Spectrum+2/+3/PC with Emulator**	**8,00 €**
+3 drive belt	2,00 €
Wafadrive Cartridges 16K= 7,00 €, 32K= 7,50 €, 64K	8,00 €
Used:	
Sinclair ZX Spectrum 128k, complete with all cables	144,00 €
Sinclair ZX Spectrum +2, complete with all cables	70,00 €
Sinclair ZX Spectrum +2A, complete with all cables	65,00 €
Sinclair ZX Spectrum +3, built in 3" drive, complete with all cables	100,00 €
Sinclair Spectrum 48k (Gummy), complete with all cables + Introduction Tape	64,00 €
Sinclair Spectrum 48k +, complete with all cables + Introduction Tape	64,00 €
+3 Drive (tested)	74,00 €
Interface I	62,00 €
Opus Discovery Diskinterface with 1 x 720k Drive (new ROM)	118,00 €
Joystickinterface 1-Port 3,00 € 2-Port	11,00 €
Joystick (many different)	2,50 €
Sinclair SJS-Joystick (+2/+3)	6,00 €
Microdrive Cartridges (ex-software)	3,50 €

Also we have a lot of Software offers and books. Please contact us and we will send you our pricelist. Products markes with 8BC or KS are sold in the name of 8-Bit Company or Kompakt Servis. We organise the business.

Prices excluding postage. Delivery as long as stock lasts.

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